IN THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (currently amended) An audio distortion processing system comprising:

a first processing unit adapted to be in communication with an audio source wherein said first processing unit controls a plurality of parameters;

a plurality of inputs in communication with said first processing ~~source~~ unit, said plurality of inputs ~~affecting~~ respectively indicating values of said plurality of parameters;

a power amplifier in electrical communication with said first processing unit for receiving an output signal of said first processing unit, said power amplifier selectively generating a clipping signal, said power amplifier adapted to be in communication with at least one speaker;

a second processing unit in electrical communication with said power amplifier and said first processing unit for receiving said clipping signal from said power amplifier and sending a control signal to said first processing unit; and

wherein said control signal initiates at least one of either:

an incremental reduction in a level of a first parameter of said plurality of parameters until one of either said clipping signal recedes or a reduction limit of said first parameter is achieved and incremental reduction in a level of a second parameter of said plurality of parameters if a reduction limit of said first parameter is achieved and said clipping signal persists; or

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an incremental recovery of an original level of said second parameter if said clipping signal is not detected and an incremental recovery of an original level of said first parameter ensues if said original level of said second parameter is recovered and said clipping signal is not detected.

2.   (currently amended) The audio distortion processing system of claim 1, wherein said reduction limit of said first parameter is a function of said a first input of said plurality of inputs.

3.   (currently amended) The audio distortion processing system of claim 1, wherein said reduction limit of said first parameter is equal to one half of said first input original level of said first parameter.

4.   (currently amended) The audio distortion processing system of claim 1, wherein said reduction limit of said second parameter is a function of said reduction limit of said first input parameter.

5.   (currently amended) The audio distortion processing system of claim 1, wherein said a reduction limit of said second parameter is equal to the difference between a maximum reduction value of said second parameter and said reduction limit of said first parameter.

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6.   (currently amended) The audio distortion processing system of claim 1, wherein said first parameter is bass and ~~said~~ a corresponding first input of the plurality of inputs is operator selectable bass boost.

7.   (currently amended) The audio distortion processing system of claim 1, wherein said second parameter is volume and ~~said~~ a corresponding second input of the plurality of inputs is operator selectable volume level.

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8. (currently amended) A method for controlling distortion in an audio system having first and second parameters wherein each of said parameters is a function of an operator input, said method comprising the steps of:

determining a reduction limit of said first parameter;

determining a reduction limit of said second parameter;

detecting a clipping signal in said audio system;

incrementally reducing a level of said first parameter until one of either said clipping signal recedes or said reduction limit of said first parameter is achieved;

incrementally reducing a level of said second parameter if said reduction limit of said first parameter is achieved and said clipping signal persists; and

incrementally recovering an original level of said second parameter if said clipping signal is not detected and then incrementally recovering an original level of said first parameter if said original level of said second parameter is fully recovered and said clipping signal is not detected.

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9. (original) The method of claim 8, wherein said first parameter is a bass parameter and said second parameter is a volume parameter.

10. (original) The method of claim 8, wherein said reduction limit of said first parameter is a function of an operator input.

11. (currently amended) The method of claim 8, wherein said reduction limit of said first parameter is equal to one half of a~variable~ an operator selectable first parameter level.

12. (original) The method of claim 8, wherein said reduction limit of said second parameter is a function of said reduction limit of said first parameter.

13. (original) The method of claim 8, wherein said reduction limit of said second parameter is equal to the difference between a maximum reduction limit of said second parameter and said reduction limit of said first parameter.

Claims 14 - 18 (canceled)

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